

**EXPRESS MAIL LABEL NUMBER: EL804522809US**

Docket No.: BOSTU 3.0-002 DIV  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re None Application of:  
Murphy et al.

Divisional of  
Application No.: 09/408,618

Group Art Unit: TBA

Filed: HEREWITH

Examiner: TBA

For: IDENTIFICATION OF VIRULENCE  
DETERMINANTS ACTIVATORS IN  
PROKARYOTIC PATHOGENS

Commissioner for Patents  
Washington, DC 20231

**PRELIMINARY AMENDMENT**

Dear Sir:

Applicants submit the following amendments and remarks.

**IN THE SPECIFICATION:**

**CLEAN COPY OF AMENDED SPECIFICATION PARAGRAPH:**

**[0001]** This application is a divisional of U.S. Application No. 09/406,618 filed September 30, 1999, which claims priority under 35 U.S.C. § 119(e) from U.S. Provisional Application No. 60/102,545, filed September 30, 1998, the contents of which are hereby incorporated by reference in their entirety.

**IN THE CLAIMS:**

Please cancel claims 1-17 and 21-22.

Please add new claims 26-43 as follows:

26. (NEW)The composition of claim 18 wherein said first regulatory gene encodes a diphtheria tox repressor (DtxR) protein.
27. (NEW)The composition of claim 18 wherein said first regulatory gene encodes DtxR and said first operator comprises native *tox* operator, a functional fragment of said operator or a variant of a DtxR consensus binding sequence.
28. (NEW)The composition of claim 18 wherein said first regulatory gene encodes a diphtheria tox repressor (DtxR) homologue.
29. (NEW)The composition of claim 18 wherein said DtxR homologue is an iron dependent regulator (IdeR).
30. (NEW)The composition of claim 18 wherein said first regulatory gene encodes ferric uptake regulator (Fur).
31. (NEW)The composition of claim 18 wherein said second regulatory gene encodes TetR.
32. (NEW)The composition of claim 19 wherein said second regulatory gene encodes TetR and said second operator comprises *tetO*.
33. (NEW)The composition of claim 19 wherein said reporter gene encodes chloramphenicol acetyltransferase.
34. (NEW)The composition of claim 20 wherein said second vector is a lambda phage.
35. (NEW)The composition of claim 19, wherein said first regulatory gene encodes a diphtheria tox repressor (DTXR) protein or a homologue thereof, said first operator binds said DtxR protein or homologue, said second regulatory gene encodes TetR, said second operator comprises *tetO*, and said reporter gene encodes chloramphenicol acetyltransferase.
36. (NEW) The composition of claim 20, wherein said first regulatory gene encodes a diphtheria tox repressor (DTXR) protein or a homologue thereof, said first operator binds said DtxR protein or homologue, said second regulatory gene encodes TetR, said second operator comprises *tetO*, and said reporter gene encodes chloramphenicol acetyltransferase.
37. (NEW)The composition of claim 23 wherein said chelating agent is 2,2'-dipyridyl.
38. (NEW)A recombinant host cell comprising the composition of matter of claim 18.
39. (NEW)The recombinant host cell of claim 36 which is an *E. coli* cell.
40. (NEW)A recombinant host cell comprising the composition of matter of claim 20.
41. (NEW)The recombinant host cell of claim 38 which is a *E. coli* cell.

42. (NEW) A composition comprising the recombinant host cell of claim 39 and a chelating agent.
43. (NEW) A composition comprising the recombinant host cell of claim 41 and a chelating agent.

MARKED-UP COPY OF AMENDED SPECIFICATION PARAGRAPH:

**[0002]** This application is a divisional of U.S. Application No. 09/406,618 filed September 30, 1999, which claims priority under 35 U.S.C. § 119(e) from U.S. Provisional Application No. 60/102,545, filed September 30, 1998, the contents of which are hereby incorporated by reference in their entirety.

REMARKS

Claims 18-20 and 22-43 are being presented for examination on the merits. Claims 18-25 were non-elected in the parent application. The recitations of claims 26-43 further define the genetic elements of claims 18, 19 and 20, as well as cover recombinant host cells *e.g.*, *E. coli*, that contain the genetic elements, and compositions containing these cells and a chelating agent. Support for the new claims is contained in the claims as originally filed and in the specification *e.g.*, pages 4-6. Accordingly, no new matter is being added. If there are any additional charges in connection with this requested amendment, the Examiner is authorized to charge Deposit Account No. 12-1095 therefor.

Dated: October 5, 2001

Respectfully submitted,

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